Business Standards

B

Information Systems/Technology

CONTENT STANDARD

Students in Wisconsin will select and apply current information systems / technology as they relate to personal and business decision-making in light of ethical and social issues.

Rationale: Information systems/technology continue to change. Students must be able to select from and apply the tools available. In order to make informed decisions, students must learn current technology as well as understand ethical and social issues related to the use of technology.

PERFORMANCE STANDARDS

B.12.1   Access, navigate, and use on-line services

B.12.2   Identify and use communication software

B.12.3   Enter and manipulate data using the touch method on a ten-key pad

B.12.4   Import text and graphics from other software programs

B.12.5   Use the integration features of a software package

B.12.6   Restart and recover from system failure and virus infection as necessary

B.12.7   Identify and compare types of programming languages

B.12.8   Contrast careers in the information technology industry

B.12.9   Describe emerging hardware and software

B.12.10   Import, export, and merge data

B.12.11   Identify electronic storage media

B.12.12   Analyze spreadsheet data

B.12.13   Use desktop publishing software to create documents

B.12.14   Use common features of multimedia software

B.12.15   Identify laws and rules pertaining to computer crime, fraud and abuse

B.12.16   Practice a code of ethics for information systems

B.12.17   Describe how the information technology industry impacts society

B.12.18   Send and receive faxes

B.12.19   Use electronic mail

B.12.20   Send and respond to voice messages

B.12.21   Sort and file documents according to established procedures

Internet Cafeteria Plan Search

Standard

B.12.1   Access, navigate, and use on-line services

Prompt

You are never too young to consider the long-term impact that employment decisions will have on your future. When making employment decisions, you should thoroughly explore the benefits packages the employer offers. Because benefits packages will vary from one company to another, you should carefully analyze the pay and the benefits package. Many companies offer what is called a cafeteria plan for their benefits package.

Directions

In this activity you will explore the Internet for information, use an Internet search engine to locate additional information, and record trends for each of the benefits. Follow the directions below.

1. Explore the Internet for information on cafeteria benefit plans at the URLs listed below. Answer these questions as you navigate through the sites:
   a. What is a cafeteria plan?
   b. Why is the term cafeteria plan used?
   c. What is Section 125?
   d. What benefits are typically included in a cafeteria plan?
   e. What are the potential problems with cafeteria plans?
   f. What is the future of cafeteria plans?

Ideal Technical Services	*http://www.ideal4u.com/benefits.htm*
Workplace Issues	*http://www.afscme.org/wrkplace/cafe.htm*
Benefits Link	*http://www.benefits.com*

2. As you conduct your research on cafeteria benefit plans, link to information that relates to the following benefits:
   - Health
   - Profit sharing
   - Flexible spending accounts
   - Employee discounts
   - Paid vacations and paid holidays

   Be sure to record all websites visited. Note the differences and similarities in these areas.

3. Use an Internet search engine to locate additional information about cafeteria plans. Locate specific companies that provide different benefits to their employees. Record trends for each of the benefits. Be sure to record all websites visited.

4. Evaluate the information collected about benefit packages and cafeteria plans. Determine if additional research needs to be conducted to provide adequate material.

5. Using either spreadsheet software or the table feature of your word processing software, prepare a table that summarizes your findings. In the first column list the benefit; in the second column provide a brief description; in the third column identify the pro or con of the benefit as it relates to you; in the fourth column evaluate the importance of the benefit for your team at this time of your life; and in the fifth column list two examples of companies that offer this benefit. In a separate table, list all websites visited.

Student Name _____ Date _____

Internet Cafeteria Plan

Scoring Standard

You must achieve a minimum score of "2" on criteria 1 - 5 and a "yes" on criteria 6 - 7 in order to demonstrate competence.

Rating Scale

3= Proficient; able to perform task independently and exceeds basic criteria

2= Intermediate; can perform tasks at expected level with little or no assistance

1= Introductory; is familiar with process but may need assistance in completing

0= Is unable to complete process, even with assistance

Scoring Guide

Criteria	Rating				Comments
1. You log on and view information from preselected sites on the Internet	3	2	1	0	
2. You use the functions of a web browser to navigate and save World Wide Web sites	3	2	1	0	
3. You choose appropriate search engines and directories to locate specific resources on the Internet or other on-line services	3	2	1	0	
4. You perform simple and advanced searches about topic on a search engine	3	2	1	0	
5. Table contains answers to all required research questions	3	2	1	0	
6. Content of table is organized		yes	no		
7. Table format is appropriate		yes	no		

Teacher _____ Date _____

Directions to Teacher

This activity can be adapted to any subject for any course using the given format. Allow a minimum of two days to search for material and one day to prepare table and oral presentation. While learner competence for some of the criteria on the scoring guide will be evident from the table the learner submits, you will also need to observe the learner engaging in the search process to be able to accurately rate competence for some of the criteria.

Prepare Schedule and Send E-mail

Standards

B.12.2   Identify and use communication software

B.12.19   Use electronic mail

Prompt

You are the president of the local Volunteer Association and chair the community service committee at your company. You are combining the effort of both organizations into a community project. Both the Volunteer Association and your company are co-sponsors in a blood pressure screening at City Hall. The screening will be free and will be on the last Thursday in June from 8 a.m. to 7 p.m. Create a schedule for the volunteers for that day using your word processing software. Send an e-mail to the mayor and the president of your company to remind them of the event. Attach the volunteer schedule you created.

Directions

For this activity, you will perform two tasks:

1. Create a schedule based on the scenario using your word processing software.

2. Send a simultaneous e-mail with an attachment to the recipients specified in the scenario.

As indicated in the scoring guide, your e-mail messages must include an introduction, appropriate details about the schedule, and a conclusion.

Student Name _____ Date _____

Prepare Schedule and Send E-mail

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; able to perform task independently and exceeds basic criteria

2= Intermediate; can perform tasks at expected level with little or no assistance

1= Introductory; is familiar with process but may need assistance in completing

0= Is unable to complete process, even with assistance

Scoring Guide

Criteria	Rating				Comments
1. You send an e-mail message with an attachment to both the president and mayor simultaneously	3	2	1	0	
2. Electronic message includes an introduction	3	2	1	0	
3. Electronic message includes appropriate details	3	2	1	0	
4. Electronic message includes a conclusion	3	2	1	0	
5. You save sent messages to an address book	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

You will need to use predetermined e-mail addresses for the mayor and president. A suggestion is to use your school and home e-mail addresses. You may also want your network administrator to set up special accounts just for this purpose. You will also need to look at your learners' accounts to verify that they saved to an address book.

Standard

B.12.3   Enter and manipulate data using the touch method on a ten-key pad

Directions

The accuracy of each number in a list is critical to providing precise information to the reader. The speed and efficiency in which the numbers are keyed are also crucial to manipulating the data. You will be asked to enter data using the ten-key pad with correct technique, and then to print out a list. This exercise will be timed. You must:

1. Key in the list of names, room numbers and phone extensions provided to you by your instructor.

2. Print the list in ascending alphabetical order.

3. Print another copy in ascending numerical order according to room number.

4. Print another copy in ascending numerical order by phone extension.

Use a Ten-key Pad

Below is the list of names, room numbers and phone extensions you will need for this activity.

NAME	ROOM	EXT.
Dystra, Terry	A12	426
Arnold, Amy	C32	129
Straub, Susan	C64	386
Murphy, James	B02	948
Wallace, Curtis	B17	635
Ruderer, Carolyn	A09	521
Boehnen, Martin	C80	712
Popelka, Ryan	A18	103
Dowd, Daniel	B04	019
Nasim, Asaf	C51	547

Student Name _____ Date _____

Use a Ten-key Pad

Scoring Standard

You must achieve a rating of at least "2" or "yes" on each criterion to demonstrate competence.

Rating Scale

3= Completely or nearly accurate
2= Mostly accurate
1= Somewhat accurate
0= Almost totally inaccurate; many mistakes

Scoring Guide

Criteria	Rating	Comments
1. Names are accurately keyed	3 2 1 0	
2. Room numbers are accurately keyed	3 2 1 0	
3. Extension numbers are accurately keyed	3 2 1 0	
4. List is printed in alphabetical order	3 2 1 0	
5. List is printed in ascending numerical order according to room number	3 2 1 0	
6. List is printed in ascending numerical order according to phone extension	3 2 1 0	
7. You complete tasks within time limit	yes no	

Teacher _____ Date _____

Directions to Teacher

This is one of two activity options.

This activity may be completed using a table word processing software or in a spreadsheet. Provide students with a list of names, room numbers and phone extensions or use the yellow pages to provide complete phone numbers for businesses of one type. As this is an in-class timed activity, you will need to determine an appropriate time limit, and start timing once you pass out the list of names.

Standard

B.12.3   Enter and manipulate data using the touch method on a ten-
key pad

Directions

Develop a spreadsheet that keeps track of your grades in this course.
Prior to this activity, record on a piece of paper all the assignments
possible, the points possible for each, and the number of points you
received. (Your teacher may provide you with this information.) Bring
this sheet on the day of the assessment.

1. Key in the name (or type) of each assignment, the number of points
   you earned and points possible for each assignment.

2. Add the total points possible and the total number of points you
   earned.

3. Calculate the percentage of total points you have earned this far in the
   course. In order to figure out the percentage of points you have earned,
   divide the number you have earned, by the total number of points
   possible. Then, move the decimal point over two places.

4. Update the spreadsheet throughout the remainder of the course.

Develop a Spreadsheet

Below is the name of a student, her assignments, points scored and points possible to be used in this activity:

Name: Mary Miller

ASSIGNMENT	POINTS POSSIBLE	POINTS EARNED
Ex. 4 p. 12	10	8
Ex. 2A p.26	15	14
Paragraph	10	10
Workbook p.86	25	23.5
Quiz 1	50	47
Ex. 39 p.107	5	4.5
Essay	30	18
Ex. 53 p.249	15	14
Quiz 2	50	35
Final Exam	125	113

Student Name _____ Date _____

Develop a Spreadsheet

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale
3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
1. Spreadsheet includes the names of each assignment	3 2 1 0	
2. Spreadsheet includes the number of points possible for each assignment	3 2 1 0	
3. Spreadsheet includes the number of points you earned for each assignment	3 2 1 0	
4. Spreadsheet includes the total number of points possible	3 2 1 0	
5. Spreadsheet includes the total number of points you have earned	3 2 1 0	
6. Spreadsheet includes a calculation of the percentage of total points you have earned	3 2 1 0	
7. Spreadsheet values and formulas are formatted correctly	3 2 1 0	
8. Spreadsheet labels are formatted correctly	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

There are two activity options for this standard.

If students do not have a record of their own grades in the course, provide them with the information of a fictitious student and grades for that student. Depending upon the level of students' skill in spreadsheets, you may want to add more formatting features to the activity. If you time the activity, you will need to determine an appropriate time limit.

Standard

B.12.4   Import text and graphics from other software programs

Directions

The following activity relates to image processing. You may be asked to print a task or have it viewed on the screen by your teacher. Although the emphasis of this activity is on image processing, correct spelling and grammar are essential.

Create a sign for parent-teacher conferences in your school. This sign will be displayed throughout town in local businesses to promote the conferences.

1. Open the word processing file provided to you by your instructor. This file includes the details about the conferences.

2. Copy the text and paste into your page layout software. Format the text appropriately.

3. Add a clip art image from CDs, disk or the network.

Teacher's Handout
Parent-Teacher Conferences

Below is the text to be copied and formatted into the sign learners create about parent-teacher conferences:

REMINDER: PARENT-TEACHER CONFERENCES
This is a reminder to all parents that ***there will be no school Tuesday and Wednesday of next week*** *due to parent-teacher conferences. Conferences will last 20 minutes each. If you feel you need more time, please arrange extra time at a later date with your child's teacher. Please make an effort to be on time, as teachers must meet with many parents. These conferences are an important part of your child's school development. The teachers at Jefferson Elementary look forward to meeting with you.*

Student Name _____ Date _____

Image Processing

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision may be needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
1. Sign contains text from file	3 2 1 0	
2. Text is correctly formatted	3 2 1 0	
3. Sign contains clip art from CD, disk or network	3 2 1 0	
4. Sign contains correct spelling and grammar	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

This is one of three activity options for this standard.

For this activity, word process the accompanying handout (about parent-teacher conferences) into a file that students can access either on the network or by disk. Use the accompanying scoring guide to evaluate the sign learners create.

Standard

B.12.4   Import text and graphics from other software programs

Directions

The following activity relates to image processing. You may be asked to print a task or have it viewed on the screen by your teacher. Although the emphasis of this activity is on image processing, correct spelling and grammar are essential.

You are to create a one-page informational flyer for the fourth-grade classroom. The flyer defines "What is a Rollercoaster?" and displays a picture of a rollercoaster.

1. Locate an image of a rollercoaster on the Internet. Save the image.
2. Locate supporting text for the photo. Save the text. Be sure to identify the source of the information.
3. Design the flyer in a page layout program, following correct design techniques. Insert the text and photo you located on the Internet.

Student Name _____ Date _____

Import Text and Graphics

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
1. Flyer contains image imported from the Internet	3 2 1 0	
2. Flyer contains supporting text imported from the Internet	3 2 1 0	
3. Source of text information is identified	3 2 1 0	
4. Flyer is designed in a page layout program using correct design techniques	3 2 1 0	
5. Flyer contains correct spelling and grammar	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

This is one option of an activity for this standard.

You may want to provide a different topic for each student. This activity
could also be done in pairs if there are hardware and software limitations.
(Note: there may be a fee charged for using photos located on the
Internet.)

Photo Editing

Standard

B.12.4   Import text and graphics from other software programs

Directions

The following task relates to image processing. You will create a Certificate of Course Completion. You may be asked to print it or have it viewed on the screen by your instructor. Although the emphasis of this activity is on image processing, correct spelling and grammar are essential.

To create your certificate:

1. Either scan in a photograph of yourself or take a picture of yourself with a digital camera. Open the photograph in photo editing software to resize and crop the image. If necessary, make additional changes.

2. In a word processing program, create an award certificate for yourself for completing this course. Insert the photo you revised in step one.

3. Make sure there is a balance between written and image/graphic material.

Student Name _____ Date _____

Photo Editing

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; able to perform criterion independently and exceeds expected level, no revision necessary

2= Intermediate; can perform criterion at expected level with little assistance, some revision necessary

1= Introductory; is able to perform criterion but needs assistance, much revision necessary

0= Unable to perform criterion

Scoring Guide

Criteria	Rating	Comments
1. You scan a picture (or take a digital picture) and save to a graphics file	3 2 1 0	
2. You crop or resize graphics as necessary	3 2 1 0	
3. You retrieve text and images from graphics file and insert them into the certificate	3 2 1 0	
4. Certificate is created using a word processing program	3 2 1 0	
5. Certificate has balanced written and image/ graphic material	3 2 1 0	
6. Certificate contains correct spelling and grammar	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

This is one of three activity options for this standard.

Depending upon the photo editing software students use, you may want to require additional features or changes to be made to the photo. The level of the students would also determine whether or not to provide wording for the certificate.

Standard

B.12.5   Use the integration features of a software package

B12.12   Analyze spreadsheet data

Prompt

You are employed by PerForm Enterprises, Inc., a wholesale distributor of computer products. PerForm has three sales representatives who travel to retail stores in their regions to sell these products. As a sales representative, each is entitled to reimbursement of typical travel expenses such as food, hotel rooms, and transportation. In addition, PerForm reimburses its representatives for certain other miscellaneous expenses.

You work in the accounting department of PerForm. One of your responsibilities is to keep records of the three sales representatives' expenses to analyze when new budgets are being reported. Each sales representative completes a daily expense report showing how much was spent in four categories: lodging, meals, transportation and miscellaneous.

Directions

One of the major changes taking place in business today is the use of personal computers to perform and integrate many office tasks. This simulation is divided into five steps. Each step uses a different software application.

Before beginning this project, you will need to create a folder named DATA**, with the asterisks representing your initials. All files you create in this project should be placed in this folder.

Step 1

1. Using the Daily Expense Reports information sheet, organize and input the data into a word processing table.
2. Print the table.

Step 2

1. Copy the word processing table into a spreadsheet.
2. For each sales representative, calculate the total for each daily expense report.
3. Calculate the totals for all expense categories for all sales representatives.
4. Print a copy of the spreadsheet with values and a copy with formulas.

Step 3

1. Import the spreadsheet into a database.
2. Design and print a report listing each region, total expenses for lodging, meals, transportation, miscellaneous, and total expenses. Also, create subtotals for each.
3. Print a copy of the report.

Step 4

1. In the spreadsheet, create a chart that will compare daily expense totals for each sales representative. Be sure to give the chart a title, legend, and label x and y axes.
2. Do not print the chart at this time.

Step 5

1. Create a mail-merge memo in the word processing software, reporting your findings after calculating the daily expense reports. The memo should be from you to each sales representative.
2. Include the following in your memo: totals for each region, grand total for all sales representatives for the week, the chart from Step 4, and any additional significant information found while preparing the expense reports.
3. Print each of the three memos, and the memo with the variable fields.

Daily Expense Reports

Below are the data for four sales representatives.

1. Bob Parker
Expenses for the week of Dec. 6-10

Date: Dec. 6
Region: 6 – S. WI
Lodging: 56.00 (Holiday Inn- Madison)
Meals: Brkfst- $4.28; lunch- $7.54; dinner- $16.82
Transportation: 172 mi. @ .32/mi. (Chicago- Madison)
Misc: copies at Kinkos- $10.82; phone call to distributor- $5.94

Date: Dec. 7
Region: 2 – NW. Chicago
Lodging: none
Meals: brkfst- $5.64; lunch- $8.00
Transportation: 172 mi. @ .32/mi. (Madison- Chicago); 43 mi. @ .32/mi.
(NW Chicago-home)
Misc: phone calls- $12.90

Date: Dec. 8
Region: 2 – NW. Chicago
Lodging: none
Meals: lunch- $18.36 (myself and client)
Transportation: 86 mi. @ .32/mi. (roundtrip to NW suburbs and back)
Misc: none

Date: Dec. 9
Region: 4 – Cleveland
Lodging: $63.00 (Best Western, Cleveland)
Meals: lunch- $6.12; dinner- $17.20
Transportation: $282 (roundtrip airfare Chicago-Cleveland)
Misc: rental car $39

Date: Dec. 10
Region: 4 – Cleveland
Lodging: none
Meals: brkfst- $4.39; lunch- $8.02
Transportation:
Misc: rental car $39

2. **Mario Olivo**
   Expenses for the week of Dec. 6-10

Date: Dec. 6
Region: 4 – Cleveland
Lodging: $72.00 (Clinton House-Cleveland)
Meals: brkfst- $6.20; lunch- $24.45 (myself and two clients); dinner- $18.30
Transportation: $388 (roundtrip airfare Chicago-Cleveland)
Misc: rental car $24; phone calls- $8.25

Date: Dec. 7
Region: 4 – Cleveland
Lodging: $72.00 (Clinton House)
Meals: brkfst- $5.89; lunch- $32.12 (myself and three clients); dinner- $16.49
Transportation: none
Misc: rental car- $24; incidentals- $5.23

Date: Dec. 8
Region: 4 – Cleveland
Lodging: $72.00 (Clinton House)
Meals: brkfst- $4.29; lunch- $8.85; dinner- $15.30
Transportation: none
Misc: $24 rental car

Date: Dec. 9
Region: 1 – Central Chicago
Lodging: none
Meals: lunch- $21.00 (myself and client)
Transportation: 22 mi. @ .32/mi
Misc: none

Date: Dec. 10 Sick Leave
Region: none
Lodging: none
Meals: none
Transportation: none
Misc: none

3. Susan Johnson
Expenses for the week of Dec. 6-10

Date: Dec. 6
Region: 3 – NC Indiana
Lodging: $54.00 (Ramada- Fort Wayne)
Meals: lunch- $12.00; dinner- $18.00
Transportation: $180 (roundtrip airfare Chicago-Ft.Wayne)
Misc: presentation materials- $36.25

Date: Dec. 7
Region: 3 – NC Indiana
Lodging: none
Meals: brkfst- $6.00; lunch- $9.34
Transportation: none
Misc: none

Date: Dec. 8
Region: 1 – Central Chicago
Lodging: none
Meals: none
Transportation: 21 mi. @ .32/mi.
Misc: none

Date: Dec. 9
Region: 1 – Central Chicago
Lodging: none
Meals: none
Transportation: 26 mi. @ .32/mi.
Misc: software- $420

Date: Dec. 10
Region: 2 – NW Chicago
Lodging: none
Meals: lunch with client- $32.00
Transportation: 83 mi. @ .32/mi.
Misc:

Student Name _____ Date _____

Spreadsheet Data Entry

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; performs criterion independently and exceeds expectations, no revision necessary

2= Intermediate; performs criterion at expected level with little or no assistance, some revision necessary

1= Introductory; is familiar with criterion but needs assistance in completing, much revision necessary

0= Unable to perform criterion

Scoring Guide

Criteria	Rating				Comments
1. You integrate a spreadsheet and table into a word processing document	3	2	1	0	
2. You integrate spreadsheet data into database	3	2	1	0	
3. You integrate database data into a word processing database	3	2	1	0	
4. You integrate data from a word processing table into a spreadsheet	3	2	1	0	
5. Table is organized and arranged appropriately	3	2	1	0	
6. Spreadsheet has correct formulas for daily totals	3	2	1	0	
7. Spreadsheet has correct formula for grand total	3	2	1	0	
8. Database report includes subtotals	3	2	1	0	
9. Database report is logical and attractive	3	2	1	0	
10. Chart is logical and attractive	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

This simulation takes approximately one week to complete. You may want to also evaluate other software skills in each of the software applications. This activity works well as a semester review for an exam or to summarize all skills learned throughout a course.

Surviving System Failure

Standard

B.12.6   Restart and recover from system failure and virus infection as necessary

Directions

Although devastating, a system failure and virus infection is a reality in today's world. The ability to troubleshoot common problems is a skill all computer users need. For this activity, you will be given four scenarios. Identify correct procedures to follow in the event of a system failure or virus infection.

Scenarios

1. You have just booted up your computer and it has an error message indicating that it was not properly shut down. It stops at this message and does not continue. What do you do?

2. You have just turned on your computer but nothing appears on the monitor. What do you do?

3. Your friend has just had a virus infect her computer. She is unaware of any software that is able to protect her system from this happening. What do you suggest to her?

4. You have been working on your computer for an hour and as you are about to save a document, a message appears that states that your computer has detected a virus. What do you do?

Student Name _____ Date _____

Surviving System Failure

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; performs criterion independently and exceeds expectations, no revision needed

2= Intermediate; performs criterion at expected level with little or no assistance, some revision needed

1= Introductory; is familiar with process but needs assistance in completing, much revision necessary

0= Unable to perform process

Scoring Guide

Criteria	Rating	Comments
1. You identify procedures used to restart and recover from a system failure	3 2 1 0	
2. You describe security plans for information systems	3 2 1 0	
3. You identify virus scan programs	3 2 1 0	
4. You suggest virus prevention procedures	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

If possible, students should actually apply procedures to a system. Because that is not always possible, the scenarios create realistic situations. The student should provide general suggestions for each scenario, as well as specific steps to follow on your computer system. You may choose to give all scenarios to all students, or you may divide the scenarios among students. This activity can be completed orally or in writing.

Standard

B.12.7   Identify and compare types of programming languages

Directions

The programmer's job is to write instructions for the computer. Although programming is a very challenging career, a basic identification and comparison of programming languages is helpful to all computer users.

You will be given two computer program printouts that accomplish the same task, however they are written in different programming languages. In a written summary (one page or less) identify at least four differences and two similarities between the programs, providing examples of each similarity or difference.

Computer Programming Languages

Below are examples of two program printouts, written in different languages, that accomplish the same task (factorials). The first is in Visual Basic, and the second in C++.

An example in Visual Basic

```
Public Function lngNFactorial(intN As Integer) As Long
    ' Compute the value of intN factorial (intN!).
    Dim i As Integer
    Dim lngValue As Long

    ' Initialize the value of lngValue.
    lngValue = 1

    For i = 1 To intN
        lngValue = i * lngValue
    Next i

    lngNFactorial = lngValue

End Function
```

An example in C++

```
long NFactorial(int n)
{
    // Compute the value of n factorial (n!).
    int i;
    long lValue;

    // Initialize the value of lValue.
    lValue = 1;

    for (i = 1; i <= n; i++)
    {
        lValue *= i;
    }

    return (lValue);
}
```

Student Name _____ Date _____

Computer Programming Languages

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion, minor revisions needed
1= Meets some of the criterion, substantial revisions needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating				Comments
1. You identify at least four differences	3	2	1	0	
2. You identify at least two similarities	3	2	1	0	
3. You provide examples for each similarity or difference	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

For this activity you will need to provide the students with a printout of two computer programs in different programming languages. You may use the accompanying handout, or obtain a sample from a text book, web page, or a computer science class at your school or local technical college. Although directions stipulate finding four differences and two similarities, you may want to ask learners to locate more of each, as there are more than four differences and two similarities in the examples provided; use your judgment depending on your students.

Standard

B.12.8   Contrast careers in the information technology industry

Directions

Careers in information technology are being revised and created each day. In order to make informed career choices and understand the direction of information technology within an organization, it is important to understand the structure and organization of an information technology department.

For this activity you are to develop an organization chart for an information technology department in a real company. You may obtain the information from an on-site visit, interview, annual report, or a website. You must document where/how you obtained your information. Include qualifications, duties, and salaries associated with each job. You should create your chart using diagramming software, word processing software, or page layout software.

Student Name _____ Date _____

Develop an Organizational Chart

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion, minor revisions needed
1= Meets some of the criterion, substantial revisions needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating				Comments
1. You illustrate the hierarchical structure of information technology careers within a company	3	2	1	0	
2. You list the qualifications for each position	3	2	1	0	
3. You list job titles associated with each position	3	2	1	0	
4. You compare salary ranges for each position	3	2	1	0	
5. You document where/how information was obtained	3	2	1	0	
6. Organization chart is logical and descriptive	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

This is one of two activities for Business Standard B12.8.

This activity works well when combined with a field trip or guest speaker. However, there are a variety of sources from which the information can be obtained. When possible, have students use diagramming software, word processing software, or page layout software.

Research Information Technology Careers

Standard

B.12.8   Contrast careers in the information technology industry

Directions

Careers in information technology are being revised and created each day. In order to make informed career choices, it is important to understand the job duties, requirements, and education for careers in information technology. It is also significant to identify salary ranges and recognize trends in information technology careers.

For this activity you will research six different information technology careers using a variety of resources. You may obtain information from:

- the Internet
- the library
- guidance counselors
- interviews
- the WCIS Career Visions Program
- other sources

You will then develop a table that lists:

- education
- experience
- duties
- requirements
- salary ranges
- job outlook

You also must document your sources of information.

Student Name _____ Date _____

Research Information Technology Careers

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion, minor revisions needed
1= Meets some of the criterion, substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
1. Table contains six different careers in information technology	3 2 1 0	
2. Table lists the education requirements for each career	3 2 1 0	
3. Table lists the experience required for each career	3 2 1 0	
4. Table lists additional requirements for each career	3 2 1 0	
5. Table lists the duties associated with each career	3 2 1 0	
6. Table lists the salary ranges associated with each career	3 2 1 0	
7. Table lists the job outlook for each career	3 2 1 0	
8. Table documents sources of information	3 2 1 0	
9. Table contains correct spelling and grammar	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

This is one of two activity options for Business Standard B12.8.

You may need to help learners identify various careers. If possible, provide in-class research time. The Internet and WCIS Career Visions program are excellent resources for this activity. Guest speakers also provide learners with insight into careers in action.

Standard

B.12.9   Describe emerging hardware and software

Directions

For this activity you will "purchase" a workstation by using classroom
lecture material and by gathering additional material to help you make
an informed decision. In a written report, you will compare and contrast
two workstations made by different manufacturers and select and justify
the one you would purchase. Use the "Purchase a Workstation" form your
teacher will provide to you.

Purchasing a Workstation Project Guidelines

MAXIMUM AMOUNT: $_____ (to be provided by teacher)

Step One — Requirements

List the requirements you feel are necessary in a workstation. Add additional space if you need it.

1. _____

2. _____

3. _____

4. _____

5. _____

Step Two — Data Collection

Select two workstations that meet the requirements you outlined in Step One. The specifications for **ONE** of the workstations can be derived from a source on the Internet. The second workstation must be from either a newspaper ad, mail-order magazine, flyer, advertisement or printout from a computer store.

1. Identify the sources from which you obtained your information:

    Workstation #1: _____

    Workstation #2: _____

2. List the components and component prices that you would choose for each workstation (use additional space if necessary):

    Workstation #1
    Components and Prices:

    a.   f.

    b.   g.

    c.   h.

    d.   i.

    e.   j

Workstation #2
Components and Prices:

a.   f.

b.   g.

c.   h.

d.   i.

e.   j.

3. Cut and paste the advertisement used to a blank sheet of paper; print
   out the price information used from the Internet

Step Three — Compare and Contrast

Using the information from Step Two, analyze the two workstations that you
selected. Be sure to include the type of warranty, service after sale, and their
ability to be upgraded. Why did you select this type of computer and printer,
including each of the components? This section needs to be in APA report
format, and contain a minimum of 400 words. In your report, title this
section *Compare and Contrast*. Apply computer terminology used in class.

Step Four — Purchase Decision

After preparing Step Three, choose which workstation you wish to
purchase. To help you with this section, research and locate two sources
of information that help justify your decision. Cite the sources in this
section. This section needs to be in APA report format, and contain a
minimum of 250 words. In your report, title this section *Purchase
Decision*. Apply computer terminology used in class.

Step Five — Title Page

Prepare a title page for your report.

Student Name _____ Date _____

Purchase a Workstation

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion, minor revisions needed
1= Meets some of the criterion, substantial revisions needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
PURCHASING A WORKSTATION PROJECT GUIDELINES FORM		
1. Form identifies maximum dollar amount	3 2 1 0	
2. Form lists workstation requirements	3 2 1 0	
3. Form identifies sources of information	3 2 1 0	
4. Form lists prices and components for each workstation	3 2 1 0	
5. Form is accompanied by ad and/or printout	3 2 1 0	
REPORT		
6. Report contains *Compare and Contrast* analysis section that is a minimum of 400 words	3 2 1 0	
7. *Compare and Contrast* analysis contains information regarding warranty, service and upgrades	3 2 1 0	
8. *Compare and Contrast* analysis contains explanation as to why certain components were selected	3 2 1 0	

Criteria	Rating				Comments
9. Report contains *Purchase Decision* section that is a minimum of 250 words	3	2	1	0	
10. *Purchase Decision* section contains a rationale justifying purchase decision	3	2	1	0	
11. *Purchase Decision* section cites two sources that were used in the decision making process	3	2	1	0	
12. Report is written in APA format	3	2	1	0	
13. Report uses computer terminology used in class	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

Determine the maximum amount students are allowed to spend on the project. Then distribute copies of the accompanying "Purchase a Workstation" form to each student. This project could be done outside or inside class, depending on time.

Standard

B.12.10   Import, export, and merge data

Directions

There is a large variety of hardware and software used in the workforce today. The ability to import, export, and merge data within and between applications and platforms is critical for today's worker.

For this activity you will need to do the following:

1. Create a spreadsheet for your current class schedule. Include the hour, course name, teacher name, and room number.

2. Create a word processing table for textbooks used in each of your courses. Include the textbook name, the textbook authors, and the copyright date.

3. Export the word processing table as a text file.

4. Import the table into the spreadsheet.

5. Merge the data from the table into the existing class schedule data.

6. Print the new spreadsheet.

7. Submit the following items to your teacher:

    *   Class schedule spreadsheet

    *   Word processed table of textbooks

    *   Class schedule and textbook spreadsheet

Student Name _____ Date _____

Import, Export, and Merge Data

Scoring Standard

You must achieve a score of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; performs criterion independently and exceeds expectations, no revision necessary
2= Intermediate; performs criterion at expected level with little assistance, some revision necessary
1= Introductory; is able to perform criterion but needs assistance, much revision necessary
0= Unable to perform criterion

Scoring Guide

Criteria	Rating	Comments
1. You import data from other applications	3 2 1 0	
2. You export data to other applications	3 2 1 0	
3. You merge data that has been imported	3 2 1 0	
4. Final spreadsheet uses correct format	3 2 1 0	
5. Final spreadsheet is logical	3 2 1 0	
6. Final spreadsheet uses correct spelling and grammar	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

Depending on the software you are using, you may need to adjust the file
type and commands given in the directions.

Research Electronic Media Storage Systems

Standard

B.12.11   Identify electronic storage media

Prompt

You are working for the Northland Company and your job is to assess types of electronic media storage to be used in your corporation. Follow the directions below to help you come to a decision.

Directions

For this activity you will research a company that produces electronic media storage (EMS). You will present your findings in an oral presentation accompanied by a visual. Before you begin your research your instructor needs to approve the company you have chosen. Once your company has been approved, find out the following information about your company:

1. The type of hardware they produce
2. The specification for that hardware
3. The uses of that hardware
4. The cost of that hardware
5. Any other pertinent information about that hardware

If your company produces more than one type of EMS, include the information above for each type.

Then, prepare a short oral presentation summarizing your research. Your presentation should be accompanied by a visual that includes a diagram of each EMS summarizing the information gathered about it.

Student Name _____ Date _____

Research Electronic Media Storage Systems

Scoring Standard

You must achieve a score of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion, no revision needed
2= Meets most of the criterion, minor revision needed
1= Meets some criteria, substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
1. Oral report includes summary of type of hardware company produces	3 2 1 0	
2. Oral report includes specifications for hardware	3 2 1 0	
3. Oral report includes uses for hardware	3 2 1 0	
4. Oral report includes cost of hardware	3 2 1 0	
5. Oral report includes other pertinent information related to the hardware	3 2 1 0	
6. Oral report is accompanied by a visual diagramming each EMS and the information presented in the report	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

Research for this project could be done on the Internet or by using publications which provide information on emerging hardware. The information could also be obtained through a field trip, guest speakers or interviews. The presentation may be individual or group and could be done as an oral or multimedia presentation. You will need to set a time limit and deadline for the presentation and supporting materials. It is also a good idea to pre-approve the companies chosen in order to avoid several presentations on the same company and software. You may add more specifics to the scenario, such as number of employees, current hardware and software or anything else you believe to be necessary.

Design a Newsletter Using Desktop Publishing

Standard

B.12.13   Use desktop publishing software to create documents (see LA E.8.3.)

Directions

For this activity you will work in groups to create and produce a newsletter according to the following guidelines.

Your newsletter may be for an organization, school or business. The information it contains is up to you. It must be copied on white paper with black ink, back-to-back on 8 ½" by 11" paper using at least three different fonts and sizes, and have a minimum of two pages.

1. Develop a paper sketch of the newspaper including computer features and applications to be used.
2. Using a desktop publishing program:
   a. Develop a masthead for the newsletter.
   b. Below the masthead state the purpose of the newsletter and the intended audience.
   c. Import text and graphics from the Internet into the newsletter (be sure to cite your sources!).
   d. Develop and include additional text, graphics, and/or scanned pictures.
   e. Implement four of the following graphic elements in the newsletter:
      * reverse text
      * drop/raised caps
      * graphics, sidebars
      * pull quotes
      * graphic lines
      * rotated text
      * watermarks
      * text art
      * bylines
      * border
      * tables
      * end of story markers.
   f. Produce mailable quality document and print the completed newsletter.
3. Use the scoring guide for this activity to self-evaluate your newsletter.

Design a Newsletter Using Desktop Publishing

Scoring Standard

You must achieve a minimum score of "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion

Student Name _____ Date _____

Scoring Guide

Criteria	Rating	Comments
1. Newsletter contains a masthead	3 2 1 0	
2. Newsletter defines purpose and target audience	3 2 1 0	
3. Newsletter contains imported text and graphics	3 2 1 0	
4. Newsletter contains additional text, graphics, and/or scanned pictures	3 2 1 0	
5. Newsletter contains four of the designated graphic elements	3 2 1 0	
6. Newsletter contains correct grammar and spelling	3 2 1 0	
7. Newsletter is accompanied by a paper sketch listing computer features and applications used	3 2 1 0	
8. Newsletter is printed on white paper	3 2 1 0	
9. Newsletter is printed with black ink	3 2 1 0	
10. Newsletter is printed back-to-back	3 2 1 0	
11. Newsletter contains three different fonts and sizes	3 2 1 0	
12. Newsletter is a minimum of two pages	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

Allow students to choose the topics for their newsletters. Provide class time for Internet searches to obtain text and graphics. Depending on the ability of your students and available equipment, you or the students can scan photos or use the digital camera. Place these files on the network or drives available to your students.

Standard

B.12.14   Use common features of multimedia software.

Directions

A talent for public speaking is one of the greatest skills to possess. There will be many opportunities for you to implement this skill in school, work, and personal-related instances. To organize and present information to an audience, you could create overhead transparencies, 35mm slides, audience handouts, speaker's notes, or a computer-based slide presentation. This activity is based on using multimedia software to prepare a presentation.

1. Select a community hotel, motel, inn, restaurant, or supper club with community rooms for your presentation.
2. Create a clear, concise storyboard.
3. Build an object acquisition chart from the storyboard.
4. Identify and capture/create text, graphics, charts, sound, pictures, video, etc.
5. Develop a thumbnail sketch of each slide to aid in assembling the presentation.
6. Determine the interactive control between slides—include both timed and viewer activated.
7. Field test and make needed adjustments.
8. Use the scoring guide for this activity to self-evaluate your project.
9. Present to audience.
10. Be prepared to answer questions on content and construction of presentation.

Scenario

As Assistant to the Facilities Director, you are to create a computer-based slide presentation to promote the community rooms of a business. Include the following information:

1. Scanned or digital camera picture of the business with links to each of its community rooms.
2. List or show the types of activities that can be held in each room (meetings, parties, wedding receptions, etc.).
3. Use pictures, video, etc., to show the special features of each room.
4. Identify catering possibilities and costs.
5. Identify room accommodations and costs.
6. List or show the items the business can supply (tables/chairs, podium, sound system, etc.).

Prepare a Multimedia Presentation

Scoring Standard

You must achieve a score of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; performs criterion independently and exceeds expectations, no revision necessary

2= Intermediate; performs criterion at expected level with little or no assistance, some revision necessary

1= Introductory; is familiar with criterion but needs assistance in completing, much revision necessary

0= Unable to perform criterion

Student Name _____ Date _____

Scoring Guide

Criteria	Rating	Comments
1. Project includes a clear, concise storyboard	3 2 1 0	
2. Slides include scanned or digital camera pictures of the business with links to each of its community rooms	3 2 1 0	
3. Slides include a list of the types of activities that can be held in each room	3 2 1 0	
4. Slides include pictures, videos, graphics, sound, etc., to show the special features of each room	3 2 1 0	
5. Slides include a description of the catering possibilities and costs	3 2 1 0	
6. Slides include room accommodation and costs	3 2 1 0	
7. Slides include a list of pictures of the items the business can supply (tables, chairs, podium, sound system, etc.)	3 2 1 0	
8. Slides contain a minimum of ten appropriate elements such as contrast between text and background, screen transitions/builds, movement of objects, sound, animation, video, graphics, pictures, font changes/sizes/styles, color schemes, font size and styles, bulleted items, labeled video/graphics/pictures, timing, activation buttons, etc.	3 2 1 0	
9. Design elements and content are effectively combined to enhance the presentation	3 2 1 0	
10. Project is within stated time limit and/or slide limit	3 2 1 0	
11. Project contains correct grammar, spelling, punctuation, and capitalization	3 2 1 0	
12. Project is logically sequenced with timed and viewer-activated slides	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

This activity assumes students have already been trained in using a multimedia software application and have created storyboards, acquisition charts, thumbnail sketches, practice slides/stacks, etc. If not, these must be covered before the learner can construct the presentation for this activity.

Use a community business, or create a fictitious business from brochures on hotels/motels/restaurants. The topic of the presentation can be changed to meet learner/school/worksite/community needs.

You can set the number of slides or make this part of the evaluation. Learners should make full use of applications, programs, equipment, and staff expertise available. If the topic is changed, this activity could be evaluated by other classroom teachers, worksite supervisors, mentors, peer group, community organizations, service organizations, etc. Refer learners to the Scoring Guide Criteria in order to complete the project.

Additional Ideas

1. Sales presentation for a product or equipment
2. Promotional presentation of the Business/Marketing Department or individual programs within the department
3. Introduce new teachers giving subjects taught, hobbies, family information, favorite saying, etc.
4. Family tree
5. Favorite holiday
6. My state
7. Promote or introduce a popular music group
8. Promote places of interest in the community
9. Promote a business in the community
10. Promote a community organization
11. Topics from other subject areas—chemistry demonstration, historical event/person, endangered species, author and work, foreign language tutorial of common words, etc.
12. Planning a tour of _____ or trip to _____

Standard

B.12.15   Identify laws and rules pertaining to computer crime, fraud and abuse

Directions

It is essential to be aware of computer crime, fraud, and abuse. Your personal well-being, money, privacy, development, artistic endeavor, etc., is at stake.

1. In order to become further aware of this type of crime, research and gather information regarding a case of computer crime, fraud or abuse. You may use the Internet, library, or materials provided by your teacher. Be sure to document where you obtained your information.

2. Create a 2-3 page word-processed report summarizing the case you researched including the laws and rules pertaining to the case, and the status or outcome of the case.

3. You will be evaluated according to the scoring guide for this activity.

Student Name _____ Date _____

Computer Crime, Fraud or Abuse

Scoring Standard

You must achieve a minimum score of "2" in all numerical categories and a "yes" in all "yes/no" categories in order to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion
Yes= Criterion is complete
No= Criterion is not complete

Scoring Guide

Criteria	Rating	Comments
1. Report documents where information was obtained	3 2 1 0	
2. Report lists the laws and rules pertaining to the case	3 2 1 0	
3. Report includes a summary of the case involving crime, fraud or abuse	3 2 1 0	
4. Report includes a summary of the status or outcome of the case	3 2 1 0	
5. Report is between 2-3 pages long	yes no	
6. Report is word processed	yes no	
7. Report contains correct spelling and grammar	yes no	

Teacher _____ Date _____

Directions to Teacher

Allow in-class research time for students to identify a case of computer crime, fraud or abuse. If you know of any cases, you may want to suggest those to your students.

Ethics for Information System

Standard

B.12.16   Practice a code of ethics for information systems

Prompt

Ethical behavior is essential in personal, school and work activities. Consideration needs to be given to honesty, integrity, confidentiality, morality, values, loyalty, and adherence to setting policies. This applies to all aspects of technology use.

Directions

For this activity you are a student member of the District Technology Committee. Along with the rest of the committee you are to devise a Code of Ethics for information systems.

1. In your group, brainstorm a list of at least eight ethical uses/abuses. Record the list on a flip chart.

2. Compare your completed flip chart with The Ten Commandments of Computer Ethics.

3. Prepare a presentation that compares your results and identifies the issues your team did not consider. Include your team recommendation and justification for the District Code of Ethics.

The Ten Commandments of Computer Ethics

1. Thou shalt not use a computer to harm other people.
2. Thou shalt not interfere with other people's computer work.
3. Thou shalt not snoop around in other people's files.
4. Thou shalt not use a computer to steal.
5. Thou shalt not use a computer to bear false witness.
6. Thou shalt not copy or use proprietary software for which you have not paid.
7. Thou shalt not use other people's computer resources without authorization or proper compensation.
8. Thou shalt not use other people's intellectual output.
9. Thou shalt think about the social consequences of the program you are writing or the system you are designing.
10. Thou shalt always use a computer in ways that demonstrate consideration and respect for your fellow humans.

Source: Computer Ethics Institute, Washington, D.C.

Student Name _____ Date _____

Ethics for Information Systems

Scoring Standard

You must achieve a score of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating				Comments
1. Presentation produces preliminary flip chart of minimum eight uses/abuses	3	2	1	0	
2. Presentation reports on the comparison of team results to the Ten Commandments of Computer Ethics	3	2	1	0	
3. Presentation includes a District Code of Ethics	3	2	1	0	
4. Presentation is logically organized	3	2	1	0	
5. Presentation language is clear and concise	3	2	1	0	
6. Presentation justifies each item in the Code	3	2	1	0	
7. Presentation demonstrates knowledge of ethical behavior	3	2	1	0	
8. Group completes the project within the set time limit	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

For this activity, divide students into groups of four or five. Preliminary information may be given in the form of use/abuse examples to speed the process along. Provide the teams with the "Ten Commandments" handout when ready. Be sure to set a time limit for brainstorming, recording, and reporting results.

Standard

B.12.17   Describe how the information technology industry impacts society

Prompt

Technology in general impacts all aspects of life. Information technology, a relative newcomer, has made swift and far-reaching positive and negative changes in many areas. It is important to understand these changes when making education, career, and personal living choices. Your acceptance/rejection of information technology through purchase decisions, voting, and community activities is powerful.

Directions

This is an exercise to enhance your ability to understand the impact of information technology. To complete this activity, follow the guidelines below:

1. Select a topic from the list provided by your teacher.

2. Select an appropriate medium (speech, panel discussion, skit, commercial, radio program, role play, report, handout, brochure posters, display, etc.) to present the information on your chosen topic.

3. Research your topic and gather information related to your topic from a minimum of three different types of sources (e.g., all information cannot come from three different textbooks). Sources to consider are: textbooks, periodicals, other print material, interviews, surveys, Internet, TV/radio programs, videos, guest speakers, etc.

4. Make sure your project meets the criteria listed on the scoring guide and stays within the time frame identified by your teacher.

Student Name _____ Date _____

The Information Technology Industry and Society

Scoring Standard

You must achieve a score of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Meets criterion; no revision needed
2= Meets most of the criterion; minor revision needed
1= Meets some of the criterion; substantial revision needed
0= Does not meet criterion

Scoring Guide

Criteria	Rating	Comments
1. You select an appropriate medium for presenting the topic	3 2 1 0	
2. Project shows the impact of information technology	3 2 1 0	
3. Project presents data objectively	3 2 1 0	
4. Project includes the appropriate use of jargon and acronyms for the audience	3 2 1 0	
5. Project stays within the given time frame	3 2 1 0	
6. Project is clear, concise, complete, and correct	3 2 1 0	
7. Project is supported by a minimum of three different types of sources	3 2 1 0	

Teacher _____ Date _____

Directions to Teacher

Provide students with a list of topics to explore and the mediums you will consider. Meet with each student or group of students and decide on the medium for the topic. You may want to require a print backup on all presentations. For all topics, the positive and negative effects should be given. Some possible topics to consider are listed below.

- Evaluate the relative effect of computers on the environment including their disposal.
- How are computers used in a specific business?
- How are computers used in science?
- How have computers changed communication?
- What roles do computers play in government?
- What effects have computers had on the practice and enforcement of law?
- How have computers affected education?
- Has Microsoft's dominance of the operating system market hindered the computer industry?
- How does technology affect perceptions of places and regions?
- How does technology affect the location of economic activities?
- Compare a system of the present to one of the past (e.g., computers vs. typewriters) in terms of factors such as quality, efficiency, speed, cost, etc.
- Analyze how the introduction of a new development in technology has affected or could affect human activity.
- What effect does technology have on the definition of, access to, and use of resources?
- Identify a current problem facing society (e.g., mass transit, distributing natural resources, conservation, uses of natural resources) and what part technology does/could play.
- Analyze a recent technological innovation and develop an impact statement.
- Propose a technology-based solution to a community/social issue.
- Identify and analyze the stress of technology on the environment, people, or society.
- Analyze benefits, limitations, costs and consequences involved in using technology (e.g., computer-based diagnosis of patients).
- Evaluate ways in which technology has expanded human capacity.
- Describe the effects of technology on the development and change of culture.

- Identify and describe the everyday impact of recent space program developments (e.g., more sophisticated computers, remote sensing, medical imaging).

- Evaluate the impact of emerging technologies on employment, worker skills, and employee satisfaction.

- Compare and contrast the personal benefits and liabilities associated with a technological innovation (e.g., self-driven vehicles, human-implanted identification devices, open access to instant communication).

Develop Fax Usage Training

Standard

B.12.18   Send and receive faxes

Directions

Produce a manual on how to use the fax machine.

1. Identify the task and select the tools needed to complete the project.
2. Write bulleted step-by-step instructions. Both plain fax and computer fax must be covered. Make sure to use clear and complete explanations and descriptions.
3. Create or import illustrations and detailed examples.
4. Include safety and troubleshooting instructions.
5. Assemble the final product choosing language, style, and organization that are clear and understandable to your audience. Use digital keyboarding and page design standards.
6. Use the scoring guide to self-evaluate your work.
7. Field test your manual with another student and revise as needed.
8. Send and receive faxes using the instructions in your manual.

Scenario

Welcome to the Human Resources Department at J & S, Inc. You are a member of the work team responsible for employee training. Your first assignment is to produce a training manual on faxing.

Fax Manual Scoring Guide

Scoring Standard

You must achieve a minimum score of "2" or "yes" on each criterion to demonstrate competence.

Rating Scale

3= Proficient; performs criterion independently and often exceeds expectations, no revision necessary
2= Intermediate; performs criterion at expected level with little assistance, some revision necessary
1= Introductory; performs criterion but needs assistance, much revision necessary
0= Unable to perform criterion

Yes= Criterion is complete

No= Criterion is not complete

Student Name _____ Date _____

Scoring Guide

Criteria	Rating				Comments
1. Manual covers plain fax and computer fax	3	2	1	0	
2. Manual includes bulleted, step-by-step instructions	3	2	1	0	
3. Manual includes clear and complete explanations and descriptions	3	2	1	0	
4. Manual contains illustrations and/or detailed examples	3	2	1	0	
5. Manual includes safety and troubleshooting instructions (e.g., paper jams)	3	2	1	0	
6. Manual language, style, and organization are clear and understandable to the audience	3	2	1	0	
7. Manual follows digital keyboarding and page design standards	3	2	1	0	
8. You send clear, concise faxes that are received in timely manner at correct location	yes		no		
9. You receive faxes	yes		no		
10. You generate a fax log to check for sent/ received items	yes		no		

Teacher _____ Date _____

Directions to Teacher

Students will need access to a working fax machine to complete this activity. If desired, students may work in pairs to complete the project. Provide students with sample manuals as reference tools. The sending and receiving of faxes can be simulated in the classroom, performed at the worksite or job shadow experience, or completed between home and school.

Standard

B.12.20   Send and respond to voice mail messages

Directions

For this activity you will send and receive voice mail messages using the directions in the scenario below. Before attempting this activity, become familiar with your equipment and system by reading the manual or observing a teacher demonstration. Although specific instructions vary among systems, knowing how to manage one system makes the transition to another system easier.

Scenario

You are in training for the receptionist position with J & S, Inc. As part of your duties, you will be responsible for sending and receiving voice mail messages, as well as managing other tasks with the voice mail system.

1. Make reservations for Mr. Smith for the Management Development Seminar at Marquette University on June 20 and 21. They have an automated system for registration for the seminar. Leave them a message on their voice mail system enrolling Mr. Smith in the seminar.

2. Perform each of the other tasks listed on the scoring guide.

All forms of communication must be clear, appropriate and useful.

Student Name _____ Date _____

Send and Receive Voice Mail Messages

Scoring Standards

You must achieve a minimum score of "2" on each criterion to demonstrate competence.

Rating Scale

3= Completed task without prompting or restarting
2= Completed task without prompting but had to restart; or completed task with prompting and no restart
1= Completed task with prompting and restarting
0= Did not complete task

Scoring Guide

Criteria	Rating				Comments
1. You initialize the mailbox by opening the mailbox, changing the default password, and recording your name in the company directory	3	2	1	0	
2. You record a personal mailbox greeting	3	2	1	0	
3. You access messages from within office	3	2	1	0	
4. You listen to new messages	3	2	1	0	
5. You listen to saved messages	3	2	1	0	
6. You replay a message	3	2	1	0	
7. You access a previous message	3	2	1	0	
8. You pause and continue a message	3	2	1	0	
9. You forward a message	3	2	1	0	
10. You compose, record, and edit voice mail messages	3	2	1	0	
11. Voice mail message includes appropriate information	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

To conduct this activity you will need access to a voice mail system. Some students may be able to complete the activity at their job sites. It may also be possible for students to work with the receptionist at your school. As an alternative, set up a simulated situation and have students use peer activity.

Sort and File Electronic Documents

Standard

B.12.21   Sort and file documents according to established procedures

Directions

For this activity you will be asked to sort and file documents. In order to accomplish this you will need to create folders and organize the desktop by creating, opening, copying, moving, transferring, finding, and deleting files from floppy disks that your teacher will provide to you.

Scenario

Welcome to your new position in the Business Department at Wisconsin High as a teacher assistant. The person who held your position previously was not well organized, did not use efficient file management techniques or practices, and left things a mess. She left you several floppies with different files on them, none of which seem to relate to each other. Your assignment is to "clean up" the hard drive and desktop by taking the files from the floppies, and logically organizing them into folders with titles that make sense.

Student Name _____ Date _____

Sort and File Documents

Scoring Standard

You must achieve a rating of at least "2" on each criterion to demonstrate competence.

Rating Scale

3= Completed task without prompting or restarting
2= Completed task without prompting but had to restart; or completed task with prompting and no restart
1= Completed task with prompting and restarting
0= Did not complete task

Scoring Guide

Criteria	Rating				Comments
1. You create and name the new folders	3	2	1	0	
2. You move files into folders	3	2	1	0	
3. You delete unnecessary files/folders	3	2	1	0	
4. You rename files/folders to organize the files	3	2	1	0	
5. Filing system is organized and makes sense	3	2	1	0	

Teacher _____ Date _____

Directions to Teacher

Use the information below to create disks with unorganized files (note: file names are listed, but there is not accompanying text for each file; i.e., they are "empty" files). The file names should be sufficiently self-explanatory to enable students to appropriately organize them. Suggested folders are: Field Trips, Exams and Quizzes, Homework Assignments, Student Progress Reports, Meeting Notes, Wish/Supply List, Student Grades/Grade Book.

Disk #1
Field Trip to General Motors (12/4/99)
Quiz 4 – HTML
Homework handout – computer ethics
Needed supplies for comp. Lab
Grade book – Intro. To Comp. Programming
Progress Reports – all classes

Disk #2
Notes on Dpt. Meeting 9/16/99
Progress reports for Adv. Prog. Class – 10:00 am
Field Trip Consent Form
Grade book – 2nd hr. (Intro. Class)
Quiz 2 – Electronic messaging

Disk #3
List- Software Upgrades for LabB
Homework assignment – Power Point
Grade book – 2nd hr. (Intro. Class)
Grade book – 4th hr. (Honors Class)
Notes on end-of-year District-wide meeting (6/7/99)

Disk #4
Students Paid for Field Trip to Chicago
Notes on Dpt. Mtg. 5/2/99
Quiz 1 – Computer Terminology
Homework Handout – Computer Terminology
Upgrades needed for LabA
Final Exam – Adv. Prog.
Progress Reports for 2nd hr.